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Managing Hazardous Waste

Preventing environmental damage from hazardous wastes, and restoring contaminated sites for all Californians

Public Involvemen

Cleanup

Science & Tech

State of California

Department of Toxic Substances Control

Managing Hazardous Waste

FACT SHEET, July 2005

UPDATE ON ENVIRONMENTAL INVESTIGATION AT SOLAR TURBINES - HARBOR DRIVE FACILITY, SAN DIEGO, CA

INTRODUCTION

Solar Turbines Incorporated (Solar) and International Truck and Engine Corporation, formerly known as Navistar International Transportation Corporation (International) have conducted investigations at the Solar facility under a voluntary agreement and direct oversight of the California Department of Toxic Substances Control (DTSC). These investigations have determined that soil and groundwater at the Solar facility are contaminated with solvents, metals and petroleum wastes from past manufacturing operations. DTSC has identified 23 Solid Waste Management Units (SWMUs) and 10 Areas of Concern (AOC) that are potentially contaminated with hazardous waste.

FACILITY DESCRIPTION AND HISTORY

The 27-acre Site is located at 2200 Pacific Highway, San Diego, California. Approximately 1,500 employees are currently working at the facility. The surrounding land uses are commercial, industrial, and aviation.

At the facility, Solar currently fabricates, manufactures, and tests gas turbine engines and other major components that generally supply power to pipeline boost compressor pumps and stand alone emergency power generators. Gas turbine engines were first developed at the facility in 1946. Since that time various turbine-engines and turbine-driven machinery have been developed and produced.

Solar was issued a federal Resource Conservation and Recovery Act (RCRA) permit in 1987 to operate seven hazardous waste management units. These units included hazardous waste storage areas, fluid recovery systems, and a wastewater collection sump.

In 1994, the seven hazardous waste management units were conditionally closed under the oversight of DTSC. A “deed restriction” will be placed on the property stating that it can be used for industrial purposes only.

DTSC and several other local, state, and federal regulatory agencies formed a Consultative Work Group and are working with Solar and International to address the contamination through the corrective action process.

CONSULTATIVE WORK GROUP (CWG): WHO ARE WE?

California Department of Fish and Game: Maintain native fish, wildlife, plant species and natural communities for their intrinsic and ecological value and their benefits to people.

San Diego Regional Water Quality Control Board: Preserve, enhance and restore the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.

San Diego Unified Port District: *Building a Community Vision for San Diego Bay*

Protect San Diego's natural environment, provide economic stimulus, and manage the public assets for the benefit of the entire San Diego region.

Department of Environmental Health, County of San Diego: Protect the environment and enhance public health by preventing disease, promoting environmental responsibility and, when necessary, enforcing environmental and public health laws.

Environmental Services Department, City of San Diego: Created by the San Diego City Council in 1988 to ensure that all residents of San Diego are provided with a clean, safe, and ecologically sound environment.

Department of Toxic Substances Control: Restore, protect and enhance the environmental quality and economic vitality by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention.

WHAT IS CORRECTIVE ACTION PROCESS?

Facilities that operate hazardous waste management units are required to investigate and cleanup releases of hazardous wastes or constituents. This is addressed through the RCRA. The following are the RCRA Corrective Action Program's components that may or may not be required at every site:

1) RCRA Facility Assessment (RFA):

   Evaluates past operating practices, historical uses and areas of the site where releases of hazardous materials or wastes may have occurred;

2) RCRA Facility Investigation (RFI):

   Defines the source, nature and extent of contamination for units identified in the RFA;

3) Baseline Health and Ecological Risk Assessment (BHRA):

   Estimates the potential risks to human health from contamination in soil, groundwater or surface water. In this case, for San Diego Bay, it evaluates risks to human and aquatic-dependent wildlife;

4) Interim Remedial Measures:

Immediately correct high threat contamination;

5) Corrective Measures Study (CMS):

Evaluates remedial alternatives and the public comment period provides an opportunity for public input on the proposed remedial or cleanup alternatives;

6) Corrective Measure Implementation: Implements the remedial or cleanup alternative selected;

7) Corrective Action Termination Determination: Certifies that necessary actions have been completed.

INTERIM MEASURES CONDUCTED

DTSC approved an interim measure workplan to close unused groundwater wells. The former furnace vault was opened, contaminated soil removed and recapped. The two storm drains in the vicinity of the vault were properly shut down.

DTSC issued a Notice of Exemption (NOE) for this project as required by California Environmental Quality Act (CEQA). The NOE stated that the project will not have significant negative effects on the environment because of the short duration, relatively low volume of contaminated soil that will be excavated, and the controlled manner in which soils will be excavated, loaded onto trucks and taken off-site for disposal.

HISTORY AND SUMMARY OF ENVIRONMENTAL INVESTIGATIONS AT SOLAR

January 1997:

RCRA Facility Assessment (RFA): 23 SWMUs and 10 AOCs were identified and release of potential hazardous waste from these SWMUs and AOCs to environment was evaluated based on history, visual evidence of release, soil and groundwater data. Soil and groundwater investigation data provides a clear evidence that releases have occurred from the underground waste and product storage tanks and a number of process areas.

1980-2001:

RCRA Facility Investigation (RFI): This RFI was conducted in three phases to define the nature and extent of releases.

CHEMICALS OR METALS FOUND DURING THESE THREE PHASES:

- total petroleum hydrocarbons (TPHs),
- volatile organic compounds (VOCs),
- semi-volatile organic compounds (SVOCs),
- polynuclear aromatic hydrocarbons (PAHs),
- polychlorinated biphenyls (PCBs),
- heavy metals.
- VOCs were also detected in soil gas, vapor flux and air samples.
- Heavy metals were detected in pore water and surface water from samples collected near the shore adjacent to the site.
- PCBs, PAHs, and several metals potentially attributable to the site have been detected in offshore sediments adjacent to the 24-inch storm drain in San Diego Bay.

1998-2004:

In 1998 Solar submitted a Baseline Risk Assessment Work Plan. After several revisions, the Baseline Risk Assessment Work Plan was approved by DTSC in 2001 and the Baseline Risk Assessment Report was approved in 2004. This document will be used by the CWG for future risk management decisions.

SUMMARY OF BASELINE HUMAN HEALTH RISK ASSESSMENT

The Baseline Risk Assessment Report evaluated health risks for the following types of exposures:

(1) current onsite workers assuming current site conditions (paved and with existing buildings).

(2) future workers assuming the site has been cleared of all paving and buildings and with new buildings that could be anywhere on the property.

(3) workers involved in short term excavation or trenching operations.

(4) recreational users in the adjacent Bay.

For current and future exposure, workers were assumed to be exposed 250 days per year for 25 years. The results of the Baseline Risk Assessment Report indicated that risks to current onsite workers are negligible.

Although the Baseline Risk Assessment Report did not specifically evaluate potential inhalation risks to the neighboring community, the Baseline Risk Assessment Report results indicated that risks to outdoor workers onsite were not significant. Risks to the neighboring community would be even lower.

Although risks to current workers are not significant, primarily because the site is covered with asphalt, risks could be significant if the cover was removed and no cleanup actions were completed. Currently Solar has a 20 year lease and no changes to the property are anticipated during that time. If Solar vacates the property, risks may need to be re-evaluated depending on future land use.

SUMMARY OF BASELINE ECOLOGICAL RISK ASSESSMENT

The Ecological Risk Assessment Report evaluated potential risks to sea and animal life immediately adjacent to the San Diego Bay. Potential risks were evaluated for some invertebrate sea life which are in direct contact with soil or groundwater that may discharge to the bay, as well as some fish, marine mammals and birds that might eat the fish or sea life.

The results of Ecological Risk Assessment Report determined that there is a localized area of contaminated soil in the San Diego Bay next to the outlet of the 24-inch storm drain that may have potential harmful ecological threats.

FUTURE ACTIVITIES

The future corrective action activities to be conducted by Solar and DTSC:

- Solar will conduct a Corrective Measures Study (CMS) which proposes remedies to reduce the risk of exposure and submit the CMS Report to DTSC for review and approval.
- DTSC will select and approve the remedies that are most protective of human health and the environment, based on performance, feasibility, cost and other factors.
- DTSC will prepare an environmental review of the impacts of the proposed remedies based on the California Environmental Quality Act.
- DTSC will provide the public an opportunity to comment on the proposed remedies and environmental review. DTSC will consider these comments before making a final decision.
- Solar will implement and maintain the remedies selected.

HOW CAN THE COMMUNITY GET INVOLVED?

Community Survey

The DTSC encourages community members to participate in the decision-making process. As part of the community outreach, we have enclosed a brief **survey**. Please return the survey by August 15, 2005 in the enclosed postage paid envelope to let us know your concerns, questions and additional ideas for community outreach.

The **Public Participation Plan** for the project will be updated based on the survey results and will be available for review at the information repositories listed at the end of this fact sheet. The Public Participation Plan provides information to interested community members desiring to become involved or informed of corrective action activities related to this project.

Public Comment Period and Community Meeting:

A **fact sheet** announcing the public comment period for the Remedial Alternatives will be mailed to everyone on the project mailing list and advertised through a public notice in local newspapers.

A **public meeting** will be held during the public comment period to provide information to the community and receive their comments.

A **final decision** on the remedial alternative(s) will be made after the public comment period. DTSC will respond in writing to all formal comments and incorporate input into the final decision.

Mailing List

Solar and DTSC have developed a mailing list for the project. If you did not receive this fact sheet in the mail and would like to be added to the mailing list, please contact Maya Akula at (818) 551-2917 or by email at Makula@dtsc.ca.gov.

FOR MORE INFORMATION

If you would like more information about this site, please contact:

DTSC Public Participation Specialist
Maya Akula, (818) 551-2917
or email: MAkula@dtsc.ca.gov

DTSC Project Manager
Vu Nguyen, (818) 551-2199
1011 N. Grandview Ave., Glendale, CA
or email: VNuygen@dtsc.ca.gov

DTSC Public Information Officer
Jeanne Garcia, (818) 551-2199

Solar Contact
Nadine Spertus
Principal Environmental Engineer
Environmental Affairs
Solar Turbines Incorporated
2200 Pacific Highway
San Diego, CA 92186
(619) 544-5242

INFORMATION REPOSITORIES

Project documents are available for public review at the following locations:

San Diego Public Library, Central Division – Science Section
820 E. Street
San Diego, CA 92101
(619) 236-5813
Contact: Gary Klockenga
Hours: Mon-Fri 10:00 a.m. – 9:00 a.m.)

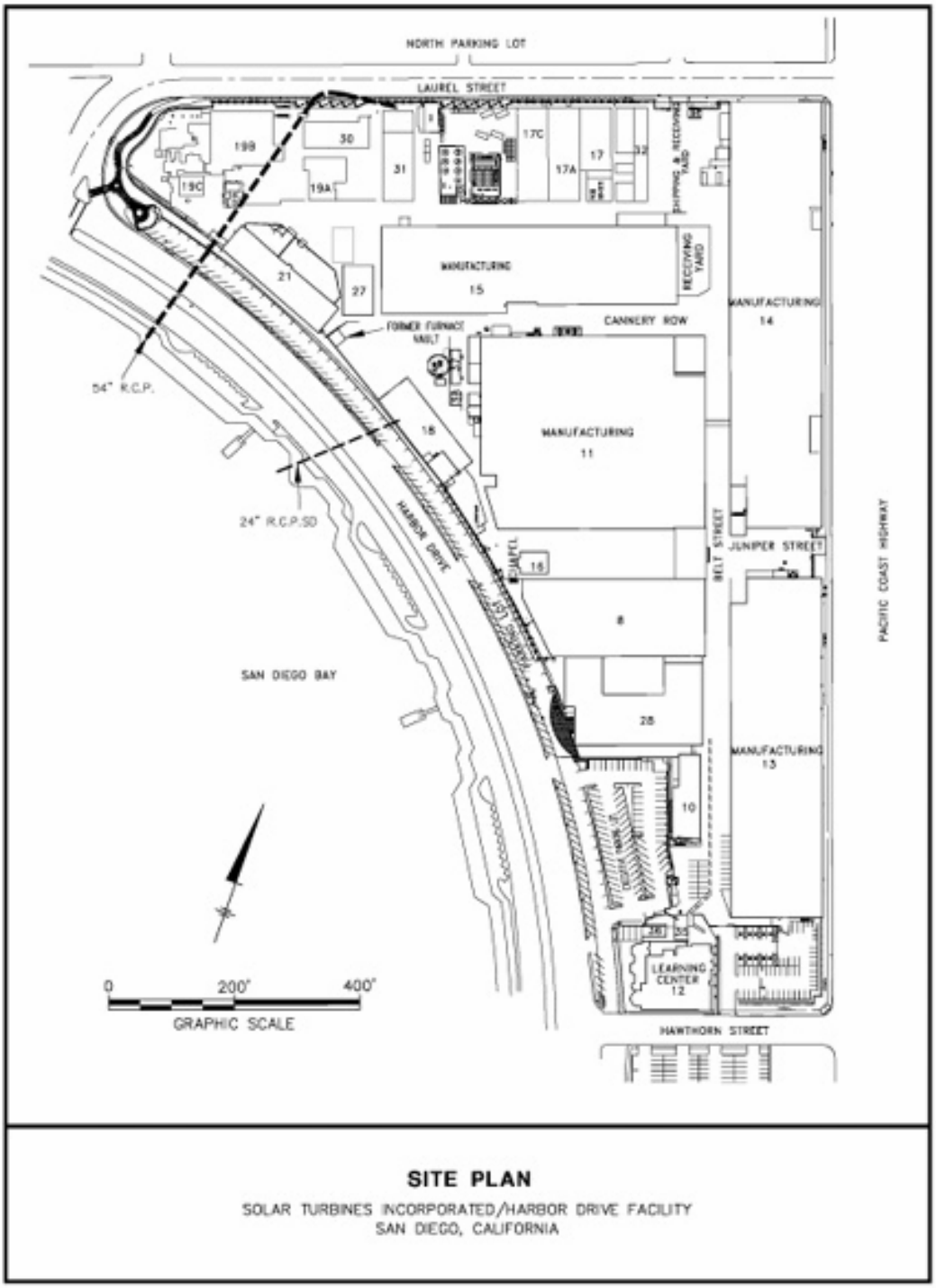
DTSC File Room
1011 N. Grandview Avenue
Glendale, CA 91201
(818) 551-2886
Hours: Mon-Fri 8:00 a.m. – 5:00 p.m.
Please call Jone Barrio for an appointment

NOTICE TO HEARING IMPAIRED INDIVIDUALS

TDD users can obtain information about the site by using the California State Relay Service (888) 877-5378 to reach the Public Participation Specialist.

SITE LOCATION FIGURE **PLANO DE LA UBICACIÓN DEL SITIO**

Solar Turbines Inc.
2200 Pacific Highway, San Diego, CA



SITE PLAN

SOLAR TURBINES INCORPORATED/HARBOR DRIVE FACILITY
SAN DIEGO, CALIFORNIA